REMARKS

Reconsideration of the Office Action of March 2, 2006 is respectfully requested. Accompanying this Office Action is a one month extension of time with requisite fee. Also enclosed with this Amendment is a copy of the European Examiner's First Office Action received for the EP national stage of corresponding PCT/US04/14420.

The objection raised against claim 1 has been remedied in the above claim amendments by inclusion of "rod" before "passageway".

The rejection of claim 1 under 35 USC 112, second paragraph, on the basis of being considered to omit essential structural cooperative relationships, is respectfully traversed. The locking means language referenced in the Office Action is presented in means-plus-function format in accordance with 35 USC 112, sixth paragraph, and a review of the corresponding disclosure of the present application includes numerous examples of structural cooperative relationships relative to the claimed locking means. As but a few examples of the locking means of the present application reference is made to the "locking means" discussion on pages 17, 18 and 21 and pages 32 to 34 which includes, amongst the many examples of suitable locking means, a preferred embodiment wherein a projection on the mixing chamber is received within a recess in the housing to prevent undesirable adjustment of the mixing chamber upon the rod sufficiently binding to the mixing chamber such that upon the rod being pulled back there is avoided the potential of adjustment of the mixing chamber within its environment (e.g., adjustment that is opposite in direction to a compression device's direction of forcing the mixing chamber). As described in the background portion of the present application the locking means provides a solution to undesired adjustment of the mixing chamber when the rod sufficiently sticks or becomes bound to the mixing chamber during, for example, a pull back on the mixing chamber by the rod, which can lead to a wide variety of problems including port misalignment.

Also, in reference to the claims rejected as being indefinite based on the phrases involving "stick" or "sticking", these phrases are respectfully submitted to be sufficiently definite to satisfy the requirements of 35 USC 112, second paragraph. It is respectfully submitted that one of ordinary skill in the art would understand the language to be definite in

the claims as presented. That is, one of ordinary skill in the art would understand the distinction between a non-sticking relationship between the rod and the mixing chamber (wherein there exists a desirable normal operating state involving a relationship with, for example, a valve block, leakage precluding interface between the rod and the mixing chamber), and a sticking relationship wherein, for example, due to a change in relationship between the rod and mixing chamber (as in a chemical adherence relationship) there is lost the normal desired relationship between the rod and mixing chamber which can lead to a binding relationship which, even if temporary, can cause the noted potential adjustment of the mixing chamber from a desired setting to one that can lead to potential problems in relative positioning.

The remainder of the 35 USC 112, second paragraph rejections are respectfully submitted both to be more of an objectionable type editorial revision nature and to have been remedied by the current claim amendments.

Claims 1-4, 20, 23-30, 34, 35 and 42 were rejected under 35 USC 102(b) as being deemed in the office action anticipated by Bertram '905. In the rejection, reference was made to the port radial retention ring 63 as being the claimed "locking means". A review of the retention ring 63 and the corresponding disclosure in lines 50-55 of column 6 and lines 40 plus in column 8 (including the avoidance of rigid tolerance requirements for the curved port surface) of Bertram '905, reveals that the ring 63 is designed to maintain a flush sliding relationship between the interior curved surface of the port housing and the reciprocating rod. Accordingly, ring 63 does not function as the claimed locking means which is designed to avoid mixing chamber adjustment in situations where non-desirable forces creep into the system to present the potential for undesirable movement of the mixing chamber within its environment. Accordingly, it is respectfully submitted that these claims and their dependents are in condition for allowance.

In the accompanying European Office Action, reference is made by the EP examiner to US 5950875 (earlier made of record in the present case) and specifically scraper washer 90 in Figure 6. This washer, like the port retention rings in Bertram '905, is not designed to provide a locking function relative to the mixing chamber as made clear from the fact that it is in between the compression spring and cold flow block of material and thus would need to be axially adjustable in that environment else the compression device would not be able to function as a compression device relative the cold flow block of material.

Claims 31-33, 36, 37 and 43 were rejected in the Office Action as being deemed obvious based on Bertram '905 in view of Brown '596. For the reasons set out below this

rejection is respectfully traversed. The Bertram "cap" 30 is formed of a porous material suitable for passage of solvent therethough (and hence formed of a material ill suited for thread formation). Also, a review of Brown shows an arrangement deemed in the prior art to be a fast approach to loading. That is by setting up an arrangement where you can slide in components in similar fashion to loading a cannon ball in a cannon, you can quickly place the series of components in the desired order and then just lock of the opposite end after the pieces are all inserted. This is seen in the Brown arrangement as well as in the US 5950875 reference (relied upon by the EP examiner for a claim sharing some similarities with the present "obviousness" based rejected claims). That is, in the '875 patent cap 72 functions like a plug once inserted in a rearward to forward direction whereupon the remaining components follow behind in the same insertion direction. The present invention takes a different approach which, while making it more complex then just sliding components in one direction following a flanged plug insertion or relative to a permanently closed front end (the simplest approach and an approach in line with the motivation discussion outlined in the rejection), provides advantages not recognized in the prior art as outlined in the discussion on pages 41 and 42 of the present application, for example.

In view of the foregoing it is respectfully submitted that all claims are allowable and that the application stands in condition for allowance. Favorable reconsideration at the Examiner's earliest convenience is thus respectfully requested.

If for any reason any fee is deemed required relative to this filing, authorization is given to charge deposit account no. 02-4300 for such fee.

Respectfully submitted,

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Date: July 3, 2006